

U.S. Patent Application Serial No. 10/530,475
Amendment filed December 20, 2007
Reply to OA dated August 31, 2007

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-3, 5-14 and 16 without prejudice or disclaimer, amend claims 15 and 17 and add new claims 18-21, as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (Canceled).

Claims 15 (Currently amended): A photoelectrode for dye-sensitized solar cells, comprising a porous titanium oxide film formed ~~by the process according to claim 1~~ on an electrically conductive transparent layer formed on ~~either a glass plate or a transparent high polymer film~~, the porous titanium oxide film being obtained by a process comprising the steps of:

applying a titanium oxide particle dispersion liquid in methanol and/or ethanol to the surface of the electrically conductive transparent layer by spray coating in such a manner that the atomized droplets of the dispersion liquid discharged from the spray coater have a mean diameter of about 1 μm to about 25 μm ; and

drying the coating by heating at a temperature of about 130°C to about 180°C or by irradiation with electromagnetic waves to form a porous titanium oxide film.

Claim 16 (Canceled).

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Claim 17 (Currently amended): The photoelectrode according to claim ~~16~~ 15, wherein the porous titanium oxide film is a porous anatase-type titanium oxide film.

Claim 18 (New): The photoelectrode according to claim 15, wherein the titanium oxide particle is anatase-type titanium oxide particle.

Claim 19 (New): The photoelectrode according to claim 15, wherein the titanium oxide particle dispersion liquid has a solids content of about 1 wt.% to about 40 wt.%.

Claim 20 (New): The photoelectrode according to claim 15, wherein the titanium oxide particle dispersion liquid has a viscosity of about 0.001 Pa·sec to about 2 Pa·sec.

Claim 21 (New): The photoelectrode according to claim 15, wherein the coating is dried by microwave irradiation.